Advance Africa's Mozambique Program: Interventions, Results and Lessons Learned, 2003 - 2005

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> Expanding family planning and reproductive health services in Africa

Mozambique Program

Interventions, Results and Lessons Learned

2003-2005







Advance Africa Mozambique Country Program

March 2005

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Working to improve the health and well-being of African families through strengthened family planning and reproductive health services

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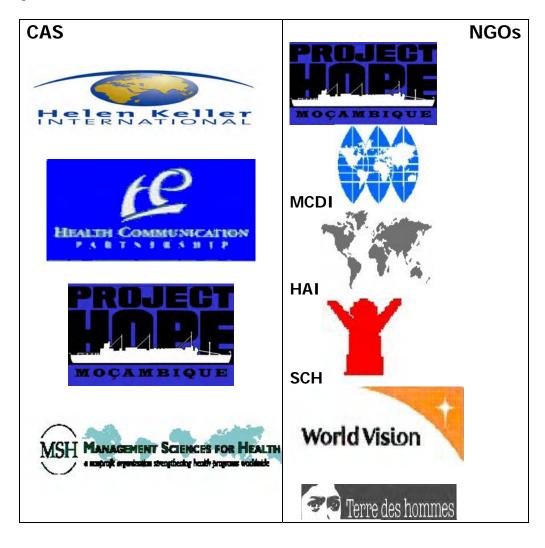


Table of Contents

| Acknowledgments | 3 |
|--|----|
| Table of Contents | 4 |
| List of Abbreviations | 5 |
| Executive Summary | 6 |
| Introduction | 9 |
| Project Activities | 10 |
| 1. FP/RH Program Component | 10 |
| Background | 10 |
| Interventions and Milestones: | 11 |
| Results | |
| Lesson Learned and Recommendations | 14 |
| 2. Coordination Component | 15 |
| Interventions | 16 |
| Results | |
| Recommendations | 22 |
| 3. Monitoring and Evaluation Component | |
| Interventions | 22 |
| Recommendations | |
| 4. Quality of Adolescent Emergency Obstetric Care Assessment | 26 |
| Background and Interventions | 26 |
| Discussion and Recommendations | |
| 5. FP/PMTCT Integration | 27 |
| Interventions | 27 |
| Recommendations | |
| 6. Optimal Birth Spacing | 28 |
| Background | 28 |
| Activities | 28 |
| Results | 30 |
| Conclusion | 34 |
| Lessons Learned | 35 |
| Recommendations | 35 |
| References | 37 |
| Annex | 38 |

List of Abbreviations

ACS Agente Comunitario de Saude (Community Health Worker)

AIDS Acquired Immune Deficiency Syndrome

ANC Antenatal Care

CA Cooperating Agency
CHT Community Health Team
CLC Community Leader Councils

DDS Direccao Distrital de Saude (District Health Department)

DHS Demographic and Health Survey

DPS Direccao Provincial de Saude (Provincial Health Department)

HAI Health Alliance International

HCP Health Communication Partnership

HIS Health Information System

HIV Human Immunodeficiency Virus HSDS Health Service Delivery Systems

IEC Information, Education, and Communication IMCI Integrated Management of Childhood Illness

IUD Intrauterine Device

JHU Johns Hopkins University

LAM Lactational Amenorrhea Method LQAS Lot Quality Assurance Sampling

MCDI Medical Care Development International

MCH Maternal Child Health

M&L Management and Leadership Project
MSH Management Sciences for Health
MTCT Maternal to Child Transmission of HIV

MOH Ministry of Health

NGO Nongovernmental Organization

OBS Optimal Birth Spacing
OPV Oral Polio Vaccine

ORT Oral Rehydration Therapy

PPC Postpartum Care

PPS Probability Proportional to Size
PVO Private Voluntary Organization
RHF Recommended Home Fluids
TBA Traditional Birth Attendants

TdH Terre des Hommes

STI Sexually-Transmitted Infections VCT Voluntary Counseling and Testing

WV World Vision

Executive Summary

The third strategic objective (SO3) of USAID/Mozambique calls for "increased use of MCH/FP services." The Mission chose to achieve this objective through its Health Services Delivery Support (HSDS) project. In July 2003, the Advance Africa project took over the work of HSDS. Advance Africa is a centrally-funded project that works to assist missions in expanding FP/RH services. Advance Africa agreed to assist the Mission in implementing a transition program of activities until the Mission developed its new strategy. The transition program became known as the Advance Africa/Mozambique program and lasted from July 2003 until August 2004. This report presents a summary of activities and the main achievements in this period.

The Advance Africa/Mozambique program had three components: the technical family planning and reproductive health (FP/RH) component, the monitoring and evaluation (M&E) component, and the coordination component. The first component supported FP/RH programs and provided technical assistance at the central and provincial levels in Nampula and Zambezia. The second component, M&E, included support to CAs and PVOs/NGOs to gather and share indicator data and to conduct an endline knowledge, practices, and coverage (KPC) survey. The third component coordinated the work of Advance Africa, four other cooperating agencies (CAs), and six private voluntary organizations/non-governmental organizations (PVOs/NGOs) working at the national level and in 34 districts in six provinces. This component allowed Advance Africa to reposition and expand family planning in the context of other health activities and community-based services.

The goal of the **FP/RH component** was to increase the use of improved FP/RH services in Mozambique and had four specific objectives:

- 1. Increase Ministry of Health (MOH) capacity to provide FP/RH services
- 2. Increase and expand quality FP/RH services
- 3. Increase quality of FP/RH services offered to adolescents, especially pregnancy prevention, HIV/AIDS prevention and treatment, postabortion care, and treatment of sexually-transmitted infections (STIs)
- 4. Increase collaboration with NGOs and PVOs

The goal of the **M&E component** was to assist partner CAs and PVOs/NGOs in monitoring and evaluating their activities, and to provide USAID/Mozambique with timely progress and results information. In 2001, the HSDS project was launched, and subsequently conducted a baseline survey. In 2004, Advance Africa/Mozambique, in collaboration with partner PVOs/NGOs, conducted the endline survey and demonstrated improvement in knowledge, practices, and coverage of most maternal, child, FP/RH, and HIV/AIDS services. Particularly remarkable was the increase in family planning services despite the prolonged stockouts of contraceptives that affected most provinces.

The goal of the **coordination component** was to reach and link the NGOs and CAs with the MOH at central, provincial, and district levels. Coordination avoided duplication of efforts and ensured complementary efforts among all partners.

Advance Africa/Mozambique developed its Advance Africa Monitoring & Coordination Strategy (Advance Africa/MCS), which focused the coordination on the creative use of available information to make joint decisions. The Advance Africa/MCS is a participatory analysis of gaps in service provision to help document progress and results, identify and share lessons learned, and plan in a collaborative and coordinated manner.

Advance Africa coordinated four CAs: Helen Keller International (HKI), John Hopkins University (JHU), Project Hope/Change (PH), Management Science for Health (MSH), and Advance Africa/Reproductive Health (Advance Africa/RH) as well as six international and local NGOs – Save the Children (SCF), Health Alliance International (HAI), World Vision (WV), Project Hope (PH), Medical Care Development International (MCDI), and Terre des Hommes (TDH).

In addition, the Advance Africa/Mozambique program included four core-funded activities: assistance to the MOH to develop a new repositioned FP/RH policy; initiation of activities to integrate family planning with PMTCT services; assistance to FAWE/MO to introduce Life Skills Education (LSE) in schools in six provinces; and testing of the feasibility of promoting optimal birth spacing through the use of social networks.

Summary of Results

Advance Africa/Mozambique provided technical assistance in FP/RH, coordinated activities of CA and PVO/NGO activities, managed the sub-awards to six PVO/NGOs working in 34 districts, and assisted with monitoring and evaluation until September 2004. Advance Africa's approach emphasized synergy and close collaboration between CAs and PVO/NGOs.

In reproductive health, Advance Africa/Mozambique was able to train all the health staff in the provinces of Zambezia and Nampula and assisted the MOH in launching an integrated supervision program. Also, Advance Africa coordinated the activities of other CA and PVO/NGO partners and through them achieved increases in the CPR from 9.2% to 12.9%.

Advance Africa managed over \$5 million in sub-awards to partner NGO/PVO and supported them in running their programs smoothly. The Advance Africa coordinators assisted to ensure synergy among all partners and build leadership and management skills in provincial and district teams. The M&E component supported partner NGO/PVOs to conduct the endline survey and provided USAID/Mozambique with information on the results achieved.

Moreover, a new draft repositioned family planning policy was developed, and a new approach to promoting optimal birth spacing using social networks was tested. Advance Africa also assisted the MOH in holding a training of trainers in integrating family planning into PMTCT services and FAWE/MO to train trainers in reproductive health education and LSE.

Conclusions

- Advance Africa implemented a thirteen month-long transition program in Mozambique from July 2004 until August 2004.
- ➤ The program responded to the needs of USAID/Mozambique to have a mechanism to transition from the previous bilateral project to the next Mission strategy.
- ➤ Centrally funded projects are a useful mechanism for country missions to rapidly deploy technical assistance in support of their strategies.
- The Advance Africa/Mozambique program had three components that contributed to strengthening the delivery of most primary health care services, particularly for family planning and the coordinated work of the Direccao Distrital de Saude or District Health Department (DDS), the Direccao Provincial de Saude (Provincial Health Department) (DPS), and PVO/NGOs.
- ➤ The Mozambican MOH played a leadership role in all activities and ensured it would get the maximum benefit from the technical assistance provided.

Introduction

The third strategic objective (SO3) of USAID/Mozambique calls for "increased use of MCH/FP services." The Mission chose to achieve this objective through its Health Services Delivery Support (HSDS) project. In July 2003, the Advance Africa project took over from HSDS. Advance Africa is a centrally-funded project that works to assist Missions in expanding FP/RH services. Advance Africa was designed to be very responsive to the needs of USAID/Washington and country Missions. The project agreed to assist the Mission in implementing a transition program of activities until a new strategy was developed. The transition program became known as the Advance Africa/Mozambique program and lasted from July 2003 until August 2004. This report presents a summary of activities and the main achievements in this period.

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The goal of the **FP/RH component** was to increase the use of improved FP/RH services in Mozambique, and had four specific objectives:

- Increase Ministry of Health (MOH) capacity to provide FP/RH services
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In addition, the Advance Africa/Mozambique program included four core-funded activities: assistance to the MOH to develop a new repositioned FP/RH policy; initiation of activities to integrate family planning with PMTCT services; assistance to FAWE/MO to introduce "Life Skills Education" in schools in six provinces; and testing of the feasibility of promoting optimal birth spacing through social networks.

This report presents the main activities, results, lessons learned and recommendations for each component of the Advance Africa/Mozambique country program and of the project as a whole. The report is divided into five chapters describing the main project components, other activities, and general conclusions and recommendations.

Project Activities

1. FP/RH Program Component

Background

The second phase of the HSDS Project, known as the Advance Africa/Mozambique Program, aimed at meeting four objectives approved by the Ministry of Health (MOH) on May 9, 2003:

- 1. Increase the MOH capacity to provide FP/RH services
- 2. Increase and expand the quality of FP/RH services
- 3. Increase the quality of FP/RH services offered to adolescents, specifically pregnancy, HIV/AIDS, and STI prevention and postabortion care
- 4. Increase collaboration with NGOs and PVOs

The main strategy to expand and improve FP/RH services was focused on increasing the capacity of health workers in Zambezia and Nampula provinces to deliver quality services. Advance Africa also worked on improving coordination with NGOs and PVOs in the remaining HSDS

provinces of Sofala, Gaza, Manica, and Niassa. Capacity building included training of all health workers in Zambezia and Nampula on family planning, contraceptive logistics, and biosecurity. Selected staff were also trained in integrated supervision (IS) to implement the new IS program and manual. Advance Africa developed a training database which includes a list of all trained health professionals by province, professional category, type of training, location of work and of training. This database should help the MOH and DPS plan and allocate human resources according to needs.

In addition to the activities funded by USAID/Mozambique, Advance Africa assisted the MOH in repositioning its FP/RH program by convening a group that developed a new FP/RH policy. The group was assisted by Advance Africa drafted the policy document. The policy promotes health benefits of family planning services and particularly responds to youths' needs. A considerable proportion of young Mozambicans (15 years of age and above) is sexually active and requires appropriate FP/RH education and services. The policy responds to their needs by focusing on helping them become responsible parents at a time when they are ready. The benefits of optimal birth spacing and the reorientation of FP/RH services to promote spacing for three to five years are also included in the policy, starting with the document's cover. Lastly, the policy is set in the context of HIV/AIDS and emphasizes the needs of HIV-positive citizens to plan their families. The document is going to be a useful tool for MOH as it takes its FP/RH services to a higher level of quality, coverage, and effectiveness.

Interventions and Milestones:

A. Strengthening of program management, supervision and systems to effectively implement FP/RH activities at provincial and district levels

Advance Africa assisted MOH's Community Health Department to develop a new integrated supervision program (ISP). The program was approved and tested in Maputo and Sofala Provinces. Advance Africa reproduced and distributed 250 copies of the MOH's new ISP manual and guidelines to the country's 11 Health Directorates and to the health professionals who were trained in integrated supervision methods. The first MOH-led training on ISP was implemented and attended by 45 central-level health professionals of the Community Health Department. The ISP training was then replicated in Sofala and Maputo for 103 health professionals from 10 provinces. The team from the MOH Community Health Department conducted the first ISP visit to the province of Zambezia to introduce the new program. The ISP also includes a family planning component developed by Dr. Sibone, Advance Africa consultant.

B. Improvement of the Management Information System (MIS)

The MIS is functional and in use. The Community Health Department's Health Information System was upgraded by introducing the Geographical Information System (GIS). The non-spatial database was developed, relevant health indicators were introduced, the Department's staff was introduced to the new system, and a monitoring and evaluation plan to follow up the introduction of the new system was devised.

C. Increase and expansion of quality FP/RH services through strengthening of human resources and institutional capacity

Advance Africa reproduced and distributed the three manuals (514 copies each) for the training of health staff in reproductive health:

- ➤ Manual of Contraceptive Logistics (Manual de Logistica de Contraceptivos)
- ➤ Manual of the Treatment of Common Contraceptive Complications and Side Effects (Tratmento das Complicacoes e dos Efeitos Secundarios Mais Comuns com os Contraceptivos)
- Clinical Family Planning Protocols (Protocolos da Pratica Clinica de Planeamento Familiar)

Advance Africa conducted a training of trainers (TOT) in family planning and contraceptive logistics for twenty MCH nurses, nine from Zambézia and nineteen from Nampula, who acted as facilitators in the training of reproductive health professionals in their respective provinces. The same training in family planning and contraceptive logistics was also conducted for 319 nurses, MCH nurses, and elementary midwives from Nampula. The 319 staff trained represented approximately 96% of the total number of reproductive health professionals working in the Province of Nampula. Advance Africa also trained 175 MCH nurses and elementary midwives from Zambezia in family planning and contraceptive logistics. The trained staff represented approximately 91% of the total reproductive health professionals working in the province of Zambezia.

Technical and financial collaboration with Johns Hopkins University/Health Communications Partnership for the integration of the client provider interpersonal communication and counselling in family planning training to the 494 health professionals in Zambezia and Nampula. Advance Africa also collaborated with Salama, a local NGO in Nampula, to include family planning and expand their community-based activities in Nampula province.

D. Improvement of the emergency obstetric care to support efforts to reduce maternal mortality

Advance Africa conducted a TOT in biosecurity for 21 infection control district nurse supervisors in Nampula and provided continuous education training on infection control, integrated with the contraceptive logistics training to 319 reproductive health professionals from Nampula and 175 from Zambezia.

Advance Africa distributed 572 Infection Control Manuals to health professionals trained in biosecurity and essential obstetric care in Zambezia and Nampula. In collaboration with the MOH Nursing Department, Advance Africa assisted in the design and production of 15,000 posters and 5,000 booklets with messages about biosecurity distributed to reproductive health professionals and the DPS during the biosecurity trainings.

E. Increase the quality of FP/RH services offered to adolescents through assistance in implementation and management of "Youth-Friendly" Center

Advance Africa provided technical assistance to nine Youth Friendly Clinics located in six provinces and conducted a rapid evaluation of the quality of care in these nine youth friendly clinics.

Other Activities:

In addition, at the request of USAID/Mozambique, Advance Africa provided technical support to AIDI to develop a *Manual of Essential Newborn Care* (ENC) and to train staff responsible for newborn care in the provinces of Zambézia and Nampula.

Results

Besides the above achievements in capacity building, the findings of the KPC survey helped answer the "so what?" question. Did HSDS/Advance Africa, in collaboration with its partner NGOs/PVOs, increase use of family planning methods? The answer is yes. The contraceptive prevalence rate (CPR) obtained in the KPC survey was 12.9% for modern methods, which was an increase from 9.2% in the baseline. Pills and injectable contraceptives were preferred by sampled respondents, or simply most commonly offered or available (Table 1). Advance Africa had expected a much greater increase but prolonged contraceptive stock-outs in all provinces, particularly Zambezia and Nampula, disrupted the offer of services and the facilities were probably not able to meet the increased demand. Most *agentes comunitarios de saude* (ACS)s had reported to lack contraceptives for several months prior to the survey.

The KPC findings also indicated that reported knowledge regarding contraceptive methods is high in Mozambique. On average, 80% of the women aged 14-49 knew of at least one modern family planning method. Reported knowledge about where to obtain the methods was equally high for most provinces ranging from 73% to 92% (average 90.1%). Nevertheless, reported contraceptive use is 13% for all modern methods, Nampula being the province with the lowest reported rate (5.5%) for modern methods and the highest rate of traditional methods (24.6%). In average, 14% of women in this age group reported to be pregnant at the time of the survey. Gaza province, with the highest literacy rate, also scored the highest in knowledge of modern methods (23.4%).

Table 1: Percentage of women aged 14 - 49 (or partner) using a contraceptive method

| | Area of Residence | | | | | | Age of woman | | | |
|---|-----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|------------------------|----------------------|----------------------|----------------------|
| % of woman 14 - 49 who are currently using: | Gaza | Manica | Nampula | Niassa | Sofala | Zambezia | All provinces combined | 14-24 | 25-34 | 35-49 |
| No method | 57.3% | 63.1% | 56.2% | 69.2% | 65.4% | 59.4% | 61.9% | 61.3% | 59.8% | 66.8% |
| Pill IUD Depo-Provera | 13.4% 0.4% 7.3% | 8.6% 0.3% 6.2% | 4.2% 0.0% 1.0% | 3.6% 0.1% 2.7% | 4.2% 0.0% 4.6% | 8.6% 0.3% 5.9% | 7.0% 0.2% 4.6% | 7.5% 0.1% 3.1% | 6.9% 0.2% 5.5% | 6.1% 0.1% 6.2% |
| Condoms | 1.8% | 1.7% | 0.2% | 0.5% | 0.2% | 0.4% | 0.8% | 1.3% | 0.4% | 0.2% |
| Diaphragm | 0.0% | 0.0% | 0.0% | 0.1% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.1% |
| Fem. sterilization | 0.6% | 0.1% | 0.1% | 1.3% | 0.0% | 0.0% | 0.3% | 0.2% | 0.4% | 0.5% |
| Male sterilization | 0.1% | 0.0% | 0.1% | 0.1% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.1% |
| Implants | 0.0% | 0.1% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| Coitus interruptus | 0.2% | 0.1% | 0.5% | 0.2% | 0.0% | 0.1% | 0.2% | 0.2% | 0.1% | 0.3% |
| Periodic abstinence | 1.1% | 2.4% | 1.8% | 1.9% | 1.2% | 1.2% | 1.6% | 1.6% | 1.6% | 1.7% |
| LAM | 0.9% | 0.3% | 21.6% | 0.1% | 2.1% | 1.7% | 4.4% | 4.1% | 5.3% | 3.5% |
| Postpartum | | | | | | | | | | |
| abstinence | 2.5% | 1.0% | 0.3% | 7.2% | 5.8% | 0.2% | 2.9% | 3.1% | 2.8% | 2.8% |
| Any modern method Any traditional | 23.4% | 17.0% | 5.5% | 8.4% | 9.0% | 15.2% | 12.9% | 12.3% | 13.4% | 13.3% |
| method | 4.7% | 4.1% | 24.6% | 9.6% | 9.4% | 3.5% | 9.3% | 9.0% | 9.7% | 8.2% |
| Any method | 28.1% | 21.1% | 30.2% | 18.1% | 18.4% | 18.6% | 22.2% | 21.3% | 23.1% | 21.6% |
| # women currently | | | | | | | | | | |
| pregnant | 14.4% | 15.1% | 14.1% | 12.0% | 15.2% | 13.0% | 13.9% | 15.4% | 15.0% | 8.9% |
| n= # of women | 1427 | 1457 | 1485 | 1617 | 1601 | 1564 | 9,151 | 4075 | 3217 | 1860 |

Lesson Learned and Recommendations

- 1. It is possible to rapidly train all the health staff in a province and launch an intervention to revitalize family planning services province-wide. Provincial staff managed the logistics very well and provided adequate follow-up.
- 2. Most provinces do not have the transportation needed to provide supervision. This essential function needs to be coordinated with NGO partners in the provinces that have NGO support.
- 3. Achievements in FP/RH were constrained by prolonged contraceptive stock-outs in the project provinces. Coordination mechanisms should be established between logistics and service delivery functions of the Ministry of Health, the Provincial Health Department and the District Health Department.
- 4. The District Health Department should continue working on redesigning health care processes to integrate family planning services and avoid missed opportunities.
- 5. There are not formal linkages between the government health facilities and the newly created cadre of volunteer Community Health Workers (ACS) and Local Health Committees (CLCs). The Ministry of Health and the Provincial Health Department

should continue working on improving the skills of health facility staff to make use of the valuable support of ACS. The increased coordination with NGOs achieved with Advance Africa's assistance should be used to strengthen linkages, referrals, data collection, IEC, etc.

- 6. The marked preference for traditional contraceptive methods represents an opportunity for introducing fertility awareness methods such as the Standard Days Method.
- 7. Youth-friendly health facilities need to be supervised and supported to sustain service quality and increase their outreach and coverage. A larger number of youth-friendly facilities are needed, particularly to help adolescent mothers space the birth of their second child.
- 8. The Ministry of Health should continue to lead and advance the repositioning of family planning services and the promotion of optimal birth spacing.

2. Coordination Component

In July of 2003, USAID also asked Advance Africa to coordinate and monitor the activities of the six PVO/NGOs and four CAs active in six provinces of the country, in coordination with the respective provincial health directorates (DPS) and district health directorates (DDS). Through coordination, besides supporting various MCH activities, Advance Africa was able to also contribute to develop a network of community-based FP/RH services. Figure 1. shows the coordinating role Advance Africa played among and across all other CAs and PVO/NGOs.

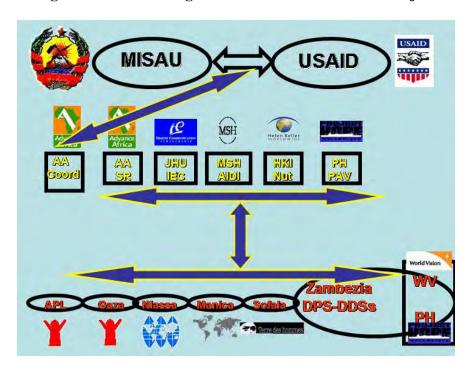


Figure 1. Coordinating Role of the Advance Africa Project

Advance Africa's approach to coordination focused on building the institutional capacity of the MOH, DPS, and DDS to manage IMCI, FP/RH, and outreach activities to communities in the area in the ten kilometers surrounding the referral health facility. The main objectives were:

- 1. Facilitate coordination among cooperating agencies through meetings with MOH, CAs, and USAID.
- 2. Facilitate coordination meetings of DPS, DDS, and NGOs.
- 3. Share experiences through the use of coordination tools, reliable indicators, analysis and presentation of results using PowerPoint, and activity tracking using Microsoft Project Manager.
- 4. Collect and use Health Information System epidemiological data for decision making

The capacity building approach was strengthened by supporting the creation of local health committees (CLC) and training of community health workers (Agente Comunitario de Saude, ACS). CLC and ACS played a major role in assisting health facilities to organize the community for the visit of the outreach team and to support the "bicycle ambulances." They also monitored and provided feedback on their satisfaction with the performance of the local health staff. The coordinator also accompanied MOH, DPS, DDS and USAID representatives to monitor NGO activities in the field. These follow up visits encouraged health and NGO staff and helped keep up the momentum of the work that they were doing.

Interventions

A. Management of Sub-Awards

On behalf to USAID/Mozambique, Advance Africa managed sub-awards to six organizations in six provinces for a total of \$5,252,543 (Table 2). In addition, Advance Africa provided an additional \$10,000 to TdH to respond to last year's cholera epidemic. These sub-awards were for the continuation of the Bridges for Health Program, and ran from 1 May 2003 to 31 August 2004. Some of the sub-awards were extended for a few months to ensure an orderly transition. An additional award was provided to HAI for the PMTCT+ Extension Project in the provinces of Manica and Sofala. This activity ended in December 2004.

Table 2. Organizations and Amount of Sub-Awards provided to Partner NGP/PVO

| Organization, Purpose & Location | End Date | Amount |
|---|----------|-------------|
| World Vision (WV) Bridges to Health Program - Zambezia | Nov-2004 | \$689,294 |
| Terre des Hommes (TdH) Bridges to Health Program - Sofala | Sep-2004 | \$631,641 |
| Save the Children Federation (SAVE) Bridges to Health Program – Nampula & Gaza | Sep-2004 | \$1,453,341 |
| Project Hope (HOPE) | | \$341,643 |

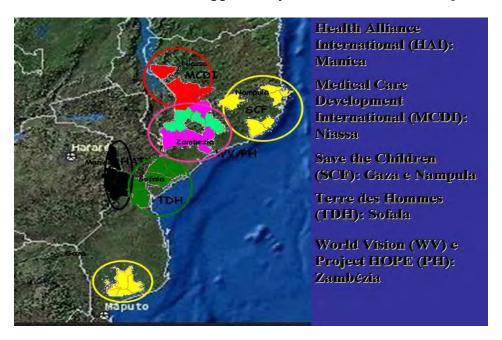
| Medical Care Development International (MCDI) | | |
|--|----------|-------------|
| Bridges to Health Program - Niassa | Aug-2004 | \$581,200 |
| Health Alliance International (HAI) Bridges to Health Program – Manica | Nov-2004 | \$606,800 |
| Health Alliance International (HAI) PMTCT+ Extension Project – Manica & Sofala | Dec-2004 | \$948,624 |
| Grand Total | | \$5,252,543 |

B. Monitoring and Coordination Strategy

To achieve the programmatic objectives and assist with the implementation of sub-awards, Advance Africa/Mozambique developed a monitoring and coordination strategy (MCS) that aimed at enabling all partners (provincial and district directors and program managers, as well as NGO/PVO partners) to use resources equitably and harmonize tools and materials.

The MCS activities helped partners share lessons learned and results and identify opportunities for solving problems creatively and for supporting each other. At the end of the project, the participating provincial and district health directions and PVO/NGOs (Figure 3.) had gained simple and effective skills to share and use information, and to make and implement decisions in a coordinated manner. Partners were also empowered with a number of coordinating tools, whose implementation did not require technical assistance.

Figure 2. Location of the PVO/NGOs supported by the Advance Africa Project



The project used six coordination intervention tools: PowerPoint Presentations, Activity Monitoring through Microsoft Project Manager, Joint Quarterly Reports, Value-added Analysis, Quarterly Review Meetings, and the use of "Intelligent Indicators." At first, the review meetings required facilitation by the Advance Africa Coordinator, but by the end of the project, facilitation was conducted by alternating partners themselves.

- 1. **PowerPoint Presentations:** Depending on the event, the Advance Africa Coordinator assisted the partners to develop PowerPoint presentations to present main indicator data and achievements. By the EOP, all partners were able to present achievements using PowerPoint.
- 2. **Activity Monitoring** is routine tracking of a program's activities. The Advance Africa Coordinator developed a tracking matrix using Microsoft Project Manager that was updated regularly. All CAs and NGOs had access to the tracking matrix. The process to update the matrix was as follows: each one of the CAs and/or NGOs sent their own workplan to the Advance Africa Coordinator, who entered them into a common matrix. Every quarter, the Advance Africa Coordinator revised reports and updated and/or modified the matrix with each one of partners' (NGO or CA). The updated matrix was sent to every body via email to serve as baseline for the next quarterly update. DPS are now able to continue to use Microsoft Project to track NGO activities in their provinces.
- 3. **Joint Quarterly Reporting:** The Coordinator regularly gathered all the CAs' quarterly reports and monitoring matrices and calculated the percentage of activities accomplished versus planned activities. Also, technical assistance and travel plans were harmonized and consolidated into a common format for all the CAs. The Advance Africa Coordinator merged all the NGOs quarterly reports, including the follow up indicators for Institutional-IMCI, Community-IMCI, CBDs, and extension of coverage of the community-based emergency transport to generate one joint report. Both documents were available in Portuguese and English and were delivered to the MOH and USAID. There is need for a staff member to serve as the provincial NGO coordinator to continue these activities.
- 4. **Quarterly Meetings:** The Advance Africa Coordinator facilitated quarterly meetings to share their achievements, issues and solutions, and generate quarterly reports. Also, on a quarterly basis, in each province, the NGOs, DPSs, DDSs, and some CAs shared their achievements, problems, and solutions. The Advance Africa Coordinator led the process using "Intelligent Indicators" to analyze and coordinate activities at district level. The process is focused at facilitating the role of DPS and DDS directorates and creating ownership of the coordination process. This was a very powerful tool to assist provincial health directors to communicate priorities and align staff's efforts.
- **5. Trend-based Value Added Analysis:** The Advance Africa coordinator quarterly tracked selected HIS indicators to demonstrate the value added given by the NGOs to the DDSs activities and help identify opportunities for greater synergy. In spite of the usual problems of the HIS in terms of incompleteness, errors, etc, the trends for 1999-2002

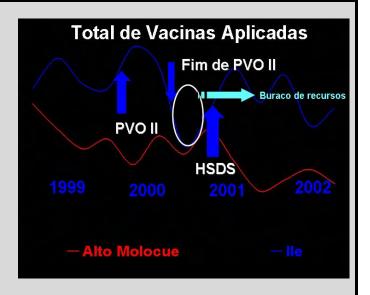
18

showed the gap and fluctuation in immunization coverage rates when the NGOs were not contributing to immunization outreach activities (Box 1).

Box 1. Value-added of Coordinating NGO/PVOs and MOH services.

"What is the "value added" of the NGOs working in the districts?" "Is it worth investing in coordinating their work?" These are questions that both NGOs and the MOH have asked. To measure the role and impact of NGOs on the health of the population, the Advance Africa Coordinator, in collaboration with the DPSs, the DDSs, World Vision, and Project HOPE, measured trends of HIS indicators between 1999 and 2002. In spite of the data collection problems of the Mozambican HIS, it was possible to demonstrate that data can be use to assess long term trends, and that districts benefited from the support of an NGO when districts were compared to those that did not. The results showed that the investment, when efficiently managed, resulted in an increased effectiveness of the DPSs' activities in the 8 districts covered by the HSDS. The HIS data helped reach three main conclusions:

- 1. NGOs strengthen the DPSs by increasing service coverage,
- 2. Without donor funding, NGOs have no mechanisms to sustain services
- 3. Projects should assist DPSs to identify effective strategies to sustain health outcomes.



6. **Intelligent Indicators:** The Advance Africa Coordinator introduced the use of "intelligent indicators" (Box 2) at the quarterly coordination meetings between the DPSs, DDSs and NGOs. The indicators used the "Service Delivery Triangle Model" to show the magnitude of missed opportunities to increase coverage of services such as antenatal care (ANC), institutional delivery, postpartum care, and polio 0 and under one year first visit to the health unit. Again the goal was to maximize coordination, synergy and coverage. In response to these data, DPS and DDS staff conducted various small scale operational research projects to address the gaps shown by the "intelligent indicators."

Box 2. Intelligent Indicators for Coordination

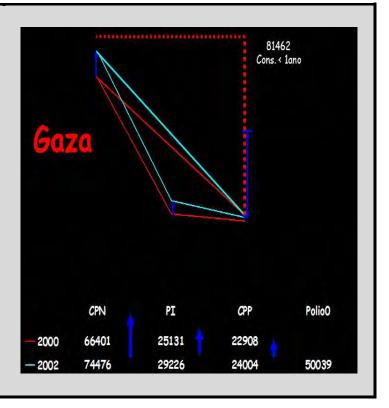
Intelligent Indicators (II): A very strategic monitoring and coordination tool was used at the quarterly meetings with the DPSs, DDSs, CAs and NGOs. The II were introduced using a "service delivery triangle" graph like the one to the right. The II helped provincial, district, and community-based health managers visualize the magnitude of missed opportunities for antenatal care, attendance at birth by a trained birth attendant, postnatal care, and immunization. The use of tools like this one helped to raise the awareness of the DPS/DDS/NGOs, and to coordinate

activities. The II also helped stimulate joint evidence-based planning, and as

plans were put into effect, to track improvements, i.e., fewer missed

opportunities. The II also generated

operational research to solve identified



The MCS involved key activities that helped to identify and capitalize on synergies among the different partners and implementation approaches. The MCS helped to analyze and advise as well on how best to use the achievements for the MOH at central, provincial, and district levels, and coordinate the inputs of USAID, the CAs, and the NGOs.

At the end of the last quarter of the project, it was important to highlight some of the activities that took place during the project, and a conference was held to present findings and to allow a step-by-step transition to DPS and respective DDS. All partners made use of all the tools and approaches introduced by Advance Africa. Partners reported improvements in care and treatment services for children at the health center level and this was attributed to post-training follow-up and support. Improvements in the community AIDI approach were reported particularly in what refers to the recognition of danger signs and counseling towards good home care practices.

Results

problems.

The coordination component strengthened the management capacity of MOH and NGOs to plan and coordinate the training conducted by various agencies. Advance Africa also built on the capacity of the NGOs and DDS to organize the demand of health services, and strengthened it by

creating the CLC, ACS, "mobile brigades," and bicycle ambulances. In addition, Advance Africa promoted the use of indicators to improve health care quality, maintenance and performance of health facilities, staff performance in case management and client provider interaction skills.

Most of the results related to the coordination activities are intangible, such as improved planning, improved communication, improved use of information, and improved presentation skills. It is hard in such short period in which Advance Africa provided support to measure the impact of these activities and of the proactive and smooth working relations forged in the process. Informal interviews and feedback received from most partners and counterparts was always very positive.

In more tangible terms, Advance Africa's MCS led to document the increased access to essential health services:

- ➤ Partners conducted 913 outreach sessions ("mobile brigades")
- ➤ The outreach activities reached 3060 communities in the 34 districts in the 6 provinces, and increased the demand for preventive and curative services.
- ➤ Partners supported 552 CLCS for community IMCI (IMCI-C) and the community health workers (ACS): 2383 for IMCI-C and 736 for community-based distribution of contraceptives.
- ➤ In addition, the NGO/PVOs supervised and provided support to 1806 of the IMCI-I trained ACS in the 6 provinces and 52% received follow-up visits by the staff at the 406 health facilities. The project supported 618 health facilities in total.
- ➤ To support implementation of the community IMCI activities, most of both, the CLCs (75%) and the ACS (80%) received follow-up visits, allowing partners to sustain the quality of care.
- ➤ Volunteer ACS referred 8693 children under 5 years old to health facilities, making use of the project-supported community transport systems.
- ➤ Follow-up visit to the 503 ACS, who distribute contraceptives in the communities in the quarter April-June 2004, showed that they distributed 95273 condoms (about 64 per ACS per month), and 10262 cycles the contraceptives (about 8 per ACS per month).
- ➤ Bicycle ambulances facilitated 2167 transfers of pregnant women to maternities.

All this work was conducted ensuring that the public health management capacity of DPS and DDS was strengthened through the coordination quarterly meetings, joint planning, monitoring and reporting activities.

Recommendations

- 1. The Ministry of Health and the Provincial Health Department should continue conducting quarterly coordination meeting using a list of simple indicators like the ones used by Advance Africa to track provincial performance.
- 2. The presentations of the provincial and district management results show that staff have reached a good level of performance and are able to analyze the results and prepare a good presentation in Power Point to communicate those results and to plan the activities for the next quarter making use of all existing resources. Quarterly presentations and prioritization should continue. All districts should have laptops and LCD projectors. In addition, the District Health Department, in collaboration with the NGOs started to replicate the quarterly meetings with Community Leader Councils and Community Health Workers. These meeting have helped to expand the coverage to facility-based services and should continue.

3. Monitoring and Evaluation Component

Interventions

Advance Africa (Advance Africa) developed an M&E plan to measure progress toward the strategic objective of USAID/Mozambique. The plan included reaching consensus among all CA and NGO partners on a number of indicators (annex 1). These indicators were used to plan the Knowledge Practices and Coverage (KPC) end line survey in July 2004. A comprehensive report is available. In this report, Advance Africa summarizes the main findings and recommendations.

Advance Africa facilitated the implementation of the KPC survey, coordinated the data collection and provided technical guidance for data entry and analysis using Epi-Info 3.22. Advance Africa also pooled and analyzed the data from all provinces and prepared a final report (KPC Survey Report, Advance Africa, 2004). Detailed reports of each province are also being prepared by the respective NGO/PVOs, but were not available at the time this report was prepared.

In general, the KPC survey showed good results. Most findings showed improvements from baseline data. The survey report presented the magnitude of the improvements observed, but did not attempt to explain them. Although marked disparities in female education levels may partially explain the differences observed across provinces, the remarkable improvements in some of them may be attributed to the hard work of certain provinces, which seem to have found better ways of reaching populations and expanding coverage. These "positive deviants," which have overcome low literacy rates and other barriers to achieve marked increases in coverage,

practices, and knowledge, deserve further operational reviews to attribute these results to their strategies and interventions.

The KPC findings also highlighted priority health areas in provinces that have decreased or not improved as much as similar provinces, and emphasize the underlying need for strengthened female primary education. Besides universal primary education, there are provinces that have important lessons to share. Zambezia has showed the greatest increases in reported knowledge of pregnancy danger signs, from 40.6% at the baseline to 71.6% at the end line. In addition, with exception of slight decreases in Gaza and Niassa, all provinces have shown increases in the coverage of antenatal care since baseline, with Zambezia showing the greatest proportional increase of more than 20% and Manica the highest coverage (85%).

Skilled health personnel assisted in 56.4% of the deliveries, also showing an increase from 44.2% in the baseline. In this case, the lessons come from Manica province, where the increase was the greatest (78.9%), followed by Gaza (70.8%), and Sofala (62.1%) provinces. The provinces of Nampula, Niassa and Zambezia, where less than 50% of deliveries were assisted by a health professional, might benefit from further research into the causes and contributing factors of these results, as well as from sharing lessons learned with more successful provinces.

Only one quarter of women are seen for postpartum visits in health facilities. This figure is higher in Manica and Gaza (nearly 28%), and lower in Niassa (19.3%). Compared to the baseline, there is an overall increase from 16.6% to 25.9%. Considering high immunization coverage rates (up to 80%), integrating postpartum visits with immunization services would help to avoid missed opportunities

In nutrition, breastfeeding practices and vitamin A coverage were found to be areas of priority for further intervention and the provinces of Niassa and Zambezia may have interesting lessons to share in this regard. Overall, 54.1% of mothers reported having given immediate breastfeeding, with the highest rates being recorded in Niassa (65.7%) and Zambezia (64.5%) and the lowest in Gaza at 30.0%. Niassa and Zambezia double the coverage of this practice in Gaza, thus posing an opportunity to learn from their interventions.

The overall average for children exclusively breastfed was 37.1% for children below four months of age and 29.7% for those below six months of age. The breastfeeding indicator grew from 27.6% in the baseline to 29.7% in the end line (for infants below six months), and from 33.2% to 37.1% for infants below four months.

Sixty percent of mothers in Zambezia and 40% in Nampula were able to cite at least three vitamin A-rich foods. In Gaza, only 14% were able to cite vitamin A-rich foods, while near 20% was the proportion seen in the remaining provinces. However, more than 40% reported giving their children at least three vitamin A-rich foods in the last two weeks. In addition, 46% of children aged 6-23 months reportedly received a vitamin A dose in the last six months.

The care of sick children is still a challenge in most provinces. Home treatment of diarrhea and malaria prevention continue to be priority intervention areas, and should be the focus of renewed community-based and outreach efforts. The practice of giving oral rehydration therapy to

children with diarrhea has decreased from baseline. While many children have mosquito nets over their beds, only about a third of the children actually slept under it.

Services dependent on NGO outreach activities, such as immunization, have shown remarkable increases. Compared to the baseline, there was a significant increase in the percentage of children aged 0-23 who were fully immunized (from 26.5% to 40.2%). This time Gaza was ranked the highest with 67%. In DPT coverage, Gaza also reached the highest coverage of 81%, followed by Sofala with 72%.

The contraceptive prevalence rate increase from 9.2% to 12.9% for modern contraception methods marks a step in the right direction, but a greater magnitude had been expected. Two factors may have influenced this finding. First, we assume that this indicator was heavily influenced by the availability of contraceptives. In the last year, many provinces (particularly Zambezia and Nampula) have suffered prolonged stockouts. Second, the traditional preference of spacing births as opposed to limiting the number of children seems to be a more accepted strategy in promoting the acceptability of FP methods, as noted by the effect of the recent Ministry of Health campaign launched in Gurue, Zambezia. Further studies should be carried out to measure birth spacing preferences and practices.

Finally, knowledge regarding HIV transmission and prevention was reported by over 50% of respondents in most provinces while comprehensive knowledge was reported by one fifth of the studied general population. Further work to increase knowledge and change behaviors should be the focus of future HIV/AIDS programs.

In summary, the end line report presented an encouraging picture of the knowledge and practices of the target populations and the coverage of the services provided by MOH and PVO/NGOs in the focus districts. The findings suggested that the unfinished agenda be focused on expanding female primary education and identifying best practices to improve nutrition, home management of the sick child, early detection of pregnancy danger signs, and expanding coverage of postnatal care and family planning services and contraceptive security.

Recommendations

For Future Surveys:

- 1. NGOs and PVOs should analyze these findings and discuss further differences across districts to facilitate the transfer of lessons learned The family planning module should include questions about birth spacing knowledge and practices.
- 2. Regular monitoring using rapid methods such as Lot Quality Assurance Sampling (LQAS) should be considered between baseline and end line surveys to allow provinces to follow up performance and have time to take corrective action if necessary. The timing of this survey does not allow the implementers to act upon the findings.

For the MOH and Provincial Health Directorates:

- 1. The Ministry of Health should consider exploring the lessons learned from this survey in order to identify "best practices." It is recommended that the Ministry appoint a group of experts to identify and list these best practices in terms of the results observed and work with the PVO/NGOs to document them.
- 2. The Provincial Health Department should use the evidence provided in this survey to further explore the replication of identified "best practices" in other non-supported districts.
- 3. Cross-province visits, sharing of lessons learned, and even secondments of staff to other provinces should be explored to facilitate identification and replication of best practices.
- 4. Each province should be provided with its corresponding database and offered further assistance in analysis and interpretation.

For the Districts:

1. Districts should continue to coordinate and lead the planning and delivery of services with the support of various partners. The findings in this survey will help inform the process and the selection of a reduced number of indicators for monitoring performance in their quarterly meetings.

For the PVO/NGOs:

- 1. NGO/PVOs should continue to use the survey methodology and regular monitoring to assess and account for their performance.
- 2. NGO/PVOs should include in their reports a brief description of their program of activities in order to explain how the results were achieved and discuss the effectiveness of their approaches.

For USAID

- 1. USAID should assist the Ministry of Health to organize a meeting to review this report, discuss its recommendations and identify immediate actions or priority areas.
- 2. USAID should promote the identification of evidence-based best practices related to the performance and results found by this survey.
- 3. USAID should consider analyzing not only the results but the cost per unit of services in order to identify the efficiency of the various models of services evaluated by this KPC survey and thus assist to inform MOH of the selection of one or another service delivery strategy.

4. Quality of Adolescent Emergency Obstetric Care Assessment

Background and Interventions

The rates of adolescent unintended pregnancies are high in Mozambique. The risk of pregnancy-related complications in adolescents is further increased by the lack of access to prenatal care and a good standard of emergency obstetric care (EOC). In Mozambique a previous study reported 30% higher maternal mortality in this age group as compared with that of older women (Granja et al., 2001). The government has already moved forward to provide specialized care for adolescents and young adults in a manner, which is more sensitive to their needs, and has begun to implement friendly services to adolescents through Youth Friendly Centers (YFC).

In June 2004, the Advance Africa assisted the Department of School and Adolescent Health of the Ministry of Health (MOH) of Mozambique to conduct an assessment of the quality of obstetric care to adolescents and young women in maternities in six provinces (Zambezia, Nampula, Sofala, Niassa, Gaza, and Manica) where YFC were created. The assessment measured the extent to which the EOC services currently provided to adolescents and young women seems to be producing outcomes consistent with current professional knowledge. The methods included three tools: a review of the facilities' patient records, an interview with providers to assess their attitudes and perceptions, and an interview to assess clients' satisfaction.

Discussion and Recommendations

The management and outcome of teenage pregnancies in the selected maternity units did not differ from the rest of the mothers in the study sample. The records suggest a number of problems in the management of EOC that require attention by maternity managers, but these do not seem to affect the quality of care provided to teenage mothers, but all mothers alike. Health workers are aware of most of these problems and look forward to improving the level of care. They are also sensitive to adolescent mothers' needs and report to understand the problems teenage mothers have to face. The level of satisfaction and perceptions of teenagers with regard to the quality of Emergency Obstetric and Early Newborn Care provided in the maternity units where they delivered their babies is high.

Adolescent mothers lack knowledge and access to family planning information and although this study was not able to measure increased risk, there is well known evidence of the negative consequences of high adolescent fertility. Access to family planning through YFS is still an untapped resource. In the absence of the community-based counseling programs, antenatal care visits seem to be the only opportunity for teenage mothers to prepare to space the next pregnancy and to protect themselves from STIs and HIV/AIDS.

YFS should make extra effort to include FP counseling in their antenatal consultations, particularly for adolescent mothers, and ensure that every mother has made a choice and made a plan to access FP services by the time of delivery. Ideally, a IUD could be inserted at that time, or mothers should

leave the maternity with enough FP supplies until her next post-partum visit. Schools and community heath workers (activistas) also need to be sensitized to the lack of information future (and present) adolescent mothers and fathers have and supported to create opportunities to allow them to ask questions and discuss concerns.

5. FP/PMTCT Integration

Interventions

One of the two strategic areas of Advance Africa's program is the repositioning family planning in the Africa region. A number of interventions are concurrently being undertaken to accomplish this. The range of interventions include policy dialogue with relevant institutions, innovative technical approaches, partnerships and the implementation of demonstration projects both in health and non-health sectors.

The integration effort in Mozambique was part of a project designed to demonstrate the feasibility of integrating family planning services into PMTCT programs. Originally, the project was to have worked with Health Alliance International (HAI), which is a local partner of the Columbia University's PMTCT Plus Program. The collaboration with HAI was abandoned for several reasons. In its place, Advance Africa worked with the Ministry of Health, who were expanding the PMTCT program nationwide.

Capacity building and follow up

Advance Africa assisted the Family Planning Unit of the Ministry of Health in translating training materials that had been developed for training of health care workers in FP/PMTCT integration. The materials were used in the five-day training of 28 health care providers drawn from ten provinces across the country. The trainees were drawn from the provincial directorate of health as well as from clinics in the provinces. This mix was to ensure that there was oversight from the provincial administration, while service delivery experience was also brought to bear on implementation.

It was the expectation that following the training, the trainees would become trainers in their respective provinces and would also coordinate integration efforts. However, a follow-up visit undertaken in December indicated that, due to lack of funds for the planned expansion of PMTCT, no fresh training had been done. The Ministry has recently undergone a personnel reshuffle and there is a new coordinator for family planning. USAID has promised that it will ensure additional training in integration will be part of its planned activities, at least in the provinces where USAID provides additional support for reproductive health. The director of the Family Health Unit also indicated that the unit would incorporate the curriculum into future trainings in family planning.

Recommendations

Despite the lack of planned follow-up training, it appears that plans are in place to hold the training this year. The necessary tools are available to ensure the smooth implementation of integration of FP/PMTCT. We therefore recommend that the MOH pursue and support FP/HIV integration training which has a very high potential for success. All training materials are available, 28 trainers have been trained the benefits for of such integration both interventions have been demonstrated in many other African countries.

6. Optimal Birth Spacing

Background

In Mozambique, child and infant mortality rates are almost three times higher when the interval between births is less then 24 months (DHS 2003). An interval of three to five years between births is considered optimal birth spacing (OBS) because it is associated with improved child and maternal survival. The *Optimal Birth Spacing Project* first identified the current knowledge of the community, the health providers, families and the women themselves about the benefits of OBS and the risks of high maternal and child mortality related to short intervals. This information was used to develop, implement and test the feasibility of an intervention to increase knowledge of the benefits of birth intervals of 3 to 5 years, the risks of short intervals, and the use of that knowledge to express the decision to space for an optimal interval, particularly among adolescent women with parity of zero or one.

Advance Africa worked with the FRONTIERS Program, Save the Children and World Vision to assist the MOH of Mozambique to implement this project in collaboration with the Provincial Directorates of Health (DDSs) in Nampula, Zambezia, and Gaza. Phase II of the OBS project was focused on the implementation of an intervention in Lioma Community, Gurue District to improve reported knowledge of the benefits of OBS and of the risks of short intervals; and increase reported use of modern family planning methods with the reported intent to space the next birth for an optimal interval. Phase III evaluated the intervention.

Purpose of the OBS Project

The overall purpose of this project was to test the feasibility of an intervention to increase reported knowledge and intention to space births among women, men and couples, in one community in one district in Mozambique.

Activities

In Phase I, Advance Africa contracted World Vision and Save the Children to conduct 24 focus group discussions in three communities in three different provinces, eight in each community; and 30 in-depth interviews of key community members. The findings show concern about pregnancy-related problems and the importance of a happy and healthy family. Children are much valued not only as future helpers and source of support in the old age, but also as a source

of happiness for the family. A family that cannot have children when they want to is not to be happy. The data from the focus group discussions shows the interest of the population to space for 2 or more years, but they are doubtful about the secondary effects of modern methods and the impact they may have on future fertility. They expressed preference for natural and traditional methods.

The MOH is very committed to OBS. It has developed a number of birth spacing messages, which were used in this project. The MOH has also taken various promotional actions including a campaign launched by the Vice-Minister in Gurue last August. In Phase II, the OBS project tested the feasibility of using local social networks to disseminate those messages, and used the local networks to facilitate making OBS decisions and expressing intention to sustain behavior changes for 3 to 5 years. The OBS project decided to use the "Standard Days Method" as the medium to convey the OBS messages to current non-FP users along with an expanded five-year calendar to help plan their OBS decisions. SDM was chosen because it is a natural method, missing from currently available methods, and would expand their choices. Based on their knowledge and experience, the Gurue DDS, World Vision, and Mozambique Family Development Association (AMODEFA) believed this method would address the unmet need of a great number of Lioma residents.

Advance Africa trained trainers and health providers at Lioma Health Center and local "activistas" on how to assess and counsel potential users. A baseline was gathered in November 2004 and dissemination of OBS messages started in December. Social network-based dissemination focused on making "Key FP Users" of the most well-known and influential members of the community so they can spread the OBS messages through the local social networks. OBS messages were disseminated through OBS Community Messengers, "Activistas" or community health workers, in schools and within initiation rites for youth.

For further details on activities, please see the OBS Project Report.

Monitoring and Evaluation

The project was monitored monthly using LQAS data to measure the dissemination of the OBS messages, the number of reported FP users, and the number of couples that report intent to space their next child. Advance Africa trained and assisted the supervisors to conduct the first round of LQAS monitoring. LQAS was used during the intervention phase to peridically assess selected health centers in catchment areas where the expected level of information and understanding (the project benchmarks) of the OBS related issues where not met. The monitoring questionnaire was developed by Advance Africa in collaboration with DDS/Gurue, and the Project Coordinator. The feasibility of this intervention would be evaluated through focus group discussions and meetings with MOH officials.

Results

Phase ONE results

The key findings suggested that knowledge of optimal birth spacing for a period of three to five years is just beginning to be diffused among the rural population in the study areas of rural Mozambique. This explains why there is contradictory information between the knowledge and practices of early adopters (e.g. women of low parity and male "positive deviants" with 0-1 children) and the mixed messages provided by respondents with 3 or more children. Respondents with larger family sizes are aware of the importance of spacing to avoid the risks of closely-spaced pregnancies and complications during delivery, but they have not yet translated that knowledge into practice.

Attitudes are shifting towards a desire for smaller families, but there are still barriers to practice. These include women's fear of divorce, the possibility that their male partner will engage in multiple sexual partnerships if she refuses sex, their husbands'/partners' mobility with consequent absences, and discordant messages. Men's concern over the effects of modern contraceptive use, such as women's bleeding (probably due to non-adherence to the pill), and other side-effects may inhibit their acceptance of modern methods. Contradictions in men's desired number of children and knowledge of risks in pregnancy and delivery could also be explained by the fact that men could have several wives/partners with whom they could have many children. Moreover, men are subject to the same distal determinants such as mobility and socio-cultural norms which have historically idealized large families.

A synthesis of the themes throughout the focus group discussions, and supported by in-depth interviews suggested that there are ways to accelerate the adoption of optimal birth spacing. Consistent themes across subgroups and sites include:

- the perception of a decreasing age of sexual onset which has negative health consequences
- the role of initiation rites as a channel for communicating messages on sexual and reproductive health, especially for girls,
- the change in "ideal" number of children towards smaller family sizes by spacing at least two years, and for three to five years among those with more knowledge
- contraceptive use among women of low parity and men with 0 to 1 children
- some awareness of risks and danger signs during pregnancy and delivery among all groups, with higher levels of knowledge among mothers-in-laws
- mixed attitudes about who in the family decides when the couple is ready to have another birth
- there are a number of social networks for communicating child spacing messages. These include mothers and mothers-in-laws, spouses, community *activistas*, the formal health care providers such as nurses, and community leaders such as teachers. The Church also plays a role in influencing norms.

Opportunities to accelerate correct information on optimal birth spacing should be undertaken through the formal health system *and* through social network channels. Adoption of innovative behaviors follows an *S*-curve, which this study suggests is occurring in rural Mozambique. This qualitative research has demonstrated the potential for using social network channels. It has highlighted which groups are early adopters, discordant messages, and resources for a social network approach to modern contraceptive use.

The goal of phase two should be to diminish discordant messages which encourage large families and promote the benefits of three to five year spacing. The intervention should strengthen the family planning providers' method mix, for example, by demonstrating how cycle beads are an additional method. The OBS Project should use social networks by targeted to the extent possible by population subgroup.

In summary, phase one suggested that a social network approach to optimal birth spacing is feasible in rural areas of Mozambique. In addition to focusing on improved access to family planning, the OBS Project should utilize a social network approach and test the introduction of new innovations such as Cycle Beads to expand knowledge, birth spacing practices, and available methods through formal and informal channels.

Phase Two Results

Household Survey

WV visited 190 households to interview wife and husband. The sample size was estimated with a 90% confidence interval and 10% error. 190 men were interviewed but only 101 women were found in the sampled households. Others were reported to be working in the fields. Gurue is a tea plantation area and every family farms a piece of land. English copies of the questionnaires are in the annex 4. The questionnaires were in Portuguese and translated into Lome, the local language of the interviewers. Two dababases were set up for data entry and WV was in charge of the data entry.

Knowledge about contraceptive methods was higher in men (96 to 81%). Thirty-seven percent of the men report to discuss the desired number of children with their wives, while fewer women report to do so (31%). The desire to have more children is higher in men; 58% of the men want to have 4 or more children (47% of the women). Knowledge about optimal birth spacing was reported in more than half of the households; 54% of the households reported to have heard about optimal birth spacing while 71% reported knowledge about HIV/AIDS.

Knowledge of both men and women about the risks of short intervals is low (11 and 10%). Both expressed concerns about side effects of contraceptives: bleeding, weakness, weight loss, and pain

Women trust their families, sisters and sisters-in-law for FP information, Men report to trust CHW and health staff when it comes to discuss FP and health issues. 77% of the households have a radio and 44% listen to it daily, especially in the evenings and this was thought to be a useful channel of communication if WV could access it.

An interesting finding was that while men reported to have more networks and access more people outside their families, women reported to trust their families, particularly their sisters and sisters-in-law for information.

Intervention Results

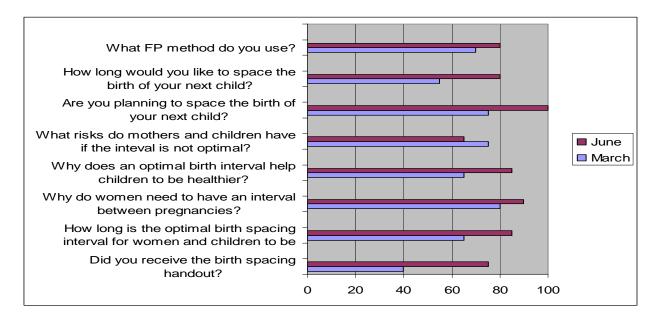
Here are the main findings men:

- 1. The percentage of men who had received an OBS pamphlet grew from 42% to 74%
- 2. Men who knew the definition of OBS as 3-5 years increased from 63% to 84%
- 3. Men expressing a desired birth interval between 3 and 5 years increased from 53% to 79%
- 4. Percentage of men who report to plan to use OBS for their families increased from 74% to 100%

And for women:

- 1. The percentage of women who had received an OBS pamphlet grew from 37% to 68%
- 2. Women who knew the definition of OBS as 3-5 years increased from 58% to 74%
- 3. Women expressing a desired birth interval between 3 and 5 years increased from 47% to 58%
- 4. The percentage of women who report to plan to use OBS for their families increased from 68% to 90%

Table 3. LQAS survey findings for Men – Lioma March –June 2005



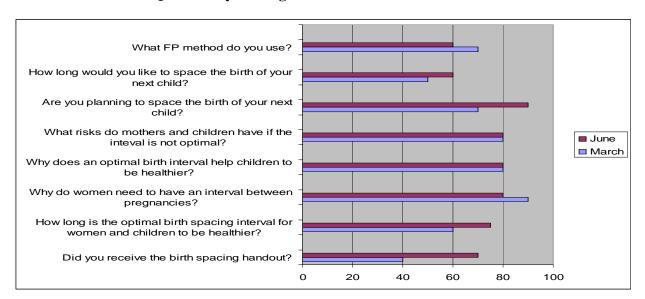


Table 4. LQAS survey findings for Women – Lioma March –June 2005

The above gender differences in the perception of messages and reported behaviors may be explained by the more limited social networks women access compared to men and their lower literacy rate and ability to read in Portuguese. These gender differences and the need of clear messages need further study.

In its final report, WV reported the concern local at the imminent end of the project and their lack of funds to continue printing the handout and distributing SDM cyclebeads. The information provided was reported to be important to the community and accepted by the local authorities and leaders. These findings were confirmed in phase three.

Phase Three results

In this phase, Advance Africa met with WV staff and conducted focus group discussions and interviews with District and health center staff and community leaders and members which revealed an increase in FP use. This was achieved mostly through the expansion of method mix and increases in the other methods. The Lioma health center had 289 new clients in the last four months compared to 50 in the previous year.

Although WV distributed 1300 cyclebeds, only 58 cyclebeads users are registered at the health center. *Activistas* "many couples are using the cyclebeads now." It was suspected that users do not want others to know whether they use a method or not, but this was not confirmed. In the focus groups, SDM was reported to help couples discuss FP decisions. Men also reported that their sex life improved as a result of 12 days of abstinence. Men reported to participate more in FP decisions and to support spouse.

World Vision's community health workers proved to be a feasible way to disseminate OBS messages through other local networks. Activities were easily integrated into WV's community activities and transportation costs where shared. Costs were considered acceptable and included the salary of the network coordinator and part of the time of supervisors in Gurue and Quelimane.

Local district health team asked WV to continue the project which showed the acceptability of the program. As a result of the spread by word of mouth, there were demands by the local health committees that the project be extended to other communities near Lioma

In spite of the high reported knowledge in the LQAS surveys and focus groups discussions, still there are discrepancies about what OBS means, particularly among the mens' groups. In addition, there was no consensus on the 3 to 5 duration of the spacing interval. In the older focus groups, the benefits of spacing for the child was emphasized, while focus groups with younger couples reported that it is good to take care of the mother's as well as the child's health. These focus group findings may be attributed to the short duration of the project (five months) and appear to justify longer implementation and monitoring.

There was consensus though on that the responsibility of spacing decisions lies mostly with men, and that the desire to have children is high. Men reported to give in into spacing due to pressure from neighbors and sisters-in-law nagging about their wives getting pregnant too often or having too many children. At that time, he allows his wife to go the health center. There was consensus on the need for spacing when many babies have low birth weight or die, and women have them too close, or have too many. Also there is consensus that children are expensive and families need to incur in many expenses and parents cannot work to take care of them when they get sick.

Birth spacing messages were reported to be known, but the most interesting feature was the SDM. This was perceived as the most value-adding component of the OBSP. Women do not waste time going to the health facility, does not have health consequences to women, it is simple and accepted by their religion. The 12 day abstinence is hard and it was reported to require a lot of "couple discipline." The use of condoms during those days was not widespread. *Activistas*, who are mostly men, reported that the method was very much accepted and that they already have requests from other communities nearby that want to have it.

Conclusion

The Mission used this centrally funded project in a very strategic way that gave it the flexibility it needed to bridge a gap in service delivery.. It was very appropriate to use this centrally funded mechanism to fill the gap between the end of a long term intervention and the development of a new strategy. This transition has created the foundation for the next bilateral intervention through the followed key achievements:

Advance Africa implemented a thirteen month-long transition program in Mozambique from July 2004 until August 2004. The program responded to the needs of USAID/Mozambique for a mechanism to transition from the previous bilateral project to the next mission strategy. The use of Advance Africa as a centrally funded project was a useful mechanism for the Mozambique mission to rapidly deploy technical assistance in support of its strategies. Advance Africa was also able to strengthen the delivery of most primary health care services, particularly for family planning and the collaborative work of DPS, DDS and PVO/NGOs. The Mozambican MOH played a leadership role in all activities and ensured to benefit the most of the technical assistance provided.

The OBS operational research project supported by core funds displayed a very high potential for improving maternal and child health in Mozambique. The DHS study showed that about half of the birth spacing intervals are less than three years, a third between three and five years, and a little less than a sixth over five years. That means that only one third of the births in Mozambique take place after an

optimal interval. This short project gathered evidence that there is need to reach young couples who are at greater risk and that there is need to address gender differences and improve the clarity of the messages. This preliminary evidence on the feasibility of using social networks, is positive and should be continued to further assess effectiveness. The project also demonstrated the feasibility of using social networks to disseminate OBS messages in Gurue, Zambezia, which could be replicated in other provinces. The approach increased knowledge and the reported intent to space the next child.

Lessons Learned

Advance Africa's intensive 13 month intervention in Mozambique demonstrated that significant results can be achieved in a very short period of time, even in a very poor country. The key to successful implementation was the use of appropriate mechanisms and the strong support of local officials. What we have also learned from our Mozambique experience is the tremendous value of a systematic process for developing coordination mechanisms and systematic follow-up. Our collaborative work was facilitated by a limited core set of standards, norms and simplified procedures developed collaboratively with our partners. In addition, we learned and appreciated the critical role of our clients, USAID and the MOH, in supporting easy and functional coordination between our different agencies. Our partners were all working in different aspects of the public health agenda (reproductive health/family planning, child survival, maternal health...), but in a well coordinated manner. The acceptance and mutual support of all four US cooperating Agencies and six local PVO/NGOs working in 34 districts within six provinces could not have happened without the tremendous support we received from USAID and the MOH. The management capacity of the Advance Africa country representative and his high level of expertise in leading public health interventions were also instrumental to the Mozambique success. However, this coordination experience would not have been as effective without the interest and full involvement of each of the CAs and NGO. It was clear that good coordination requires tolerance, openness and effective involvement of partners in the decision making process. Our experience showed that good coordination is essential to achieving good results.

The training program oriented towards making workers multi-skilled in reproductive health, FP and maternal and child health was very effective. In Zambezi with only one physician for 400,000 people, we would not have achieved significant results if we did not build the capacity of the few nurses in place to handle various RH/MCH tasks. The motivational role of our direct supervision strategy contributed to our good results as well. Good training, close supervision and regular monitoring were key to the success of Advance Africa interventions in the two provinces where we worked; Zambezi and Nampula.

Recommendations

The mission should maintain its support of the Mozambique National Family Planning Program, which was revised to reposition family planning by integrating important programmatic and policy features. The use of contraceptives for longer birth interval to improve the health of women and children has become part of the thinking of the Mozambican officials and this is well reflected in the new RH/FP program.

The success of Advance Africa coordinating CA and PVO activities to achieve enhanced results, calls for continued support to such a coordination mechanism.

The FP program will continue to need funding and political support to be successful. So, we recommend a continuation of the repositioning advocacy activities in order to convince more people and obtain more support for the FP program.

The service delivery activities must be continuously strengthened through constant supervision of workers, a reinforcement of supply chain management, and a periodic monitoring and reinforcement of the service delivery points.

References

Advance Africa, Knowledge, Practices and Coverage Survey, August 2004.

Advance Africa, FAWEMO, Adolescent Life Skills Education: Training Report, August 2004

Advance Africa, Beracochea E. Mondlane C. Knowledge, Practices and Coverage: Survey Report, October 2004

Advance Africa, Bardalez, J. Coordination Final Report, November 2004

Advance Africa, Romao, F. Family Planning Policy, December 2004

Annex

M&E Indicators

The M&E plan includes two lists of indicators: the short list and the long list. The "short list indicators" are those that have a detailed description according to USAID standards. Most of them are at the impact and population level.

The M&E plan also has a comprehensive "long list" of indicators. This list has more program indicators and is a compilation of all relevant indicators coming from all CAs and NGOs programs. This list includes process and output indicators.

The lists were developed in consensus with partners at a meeting on April 14, 2004 and with input from partners afterwards. The following sample list is for discussion at the consensus meeting. The meeting participants will mark next to the list "S" for short, "L" for long list, "N" for not useful.

SHORT LIST INDICATORS

- 1. DPT3 immunization coverage
- 2. Tetanus Toxoid immunization coverage
- 3. ORT use
- 4. Modern contraceptive use
- 5. CPR
- 6. Vitamin A coverage by province

LONG LIST INDICATORS

- 1. Adolescent use of RH/FP
- 2. Birth spacing use
- 3. Obstetric care use
- 4. Quality of observed encounters
- 5. Number of mobile brigades by province
- 6. Number of reports of community surveillance system by month/province
- 7. Number of communities with trained ACS
- 8. Intensity of training in FP, nutrition, IMCI, CPI, etc (Proporção de TS de Saúde que foram treinados em cada uma das áreas)
- 9. Number of ACS trained by province
- 10. Percentage of women that know about spacing
- 11. Percentage of women that know about spacing benefits
- 12. Percentage of women and men that approve spacing births
- 13. Percentage of women who have talked with their husband/partner about FP/spacing
- 14. Percentage of women and men who believe others approve of spacing and FP
- 15. Percentage of women and men in union that know about modern methods
- 16. Percentage of women and men who know about sources of modern methods
- 17. Percentage of women and men in union that intend to adopt a modern method
- 18. Percentage of women in union that went to a health center for spacing information
- 19. Percentage of women in union that visited a health center and requested spacing/contraceptive method information

- 20. Percentage of women in union that went to a health center and adopted a contraceptive method
- 21. Percentage of mothers that know children <5 need to receive Vitamin A
- 22. Percentage of women that report to use ACS for re-supply
- 23. Percentage of women that know the danger signs of ARI
- 24. Percentage of women that know the danger signs and home treatment of dehydration
- 25. Number and percentage of facilities that have available FP Service Delivery Points (SDP)
- 26. District Management Improvement: number of district that use indicators to monitor own and NGO activities